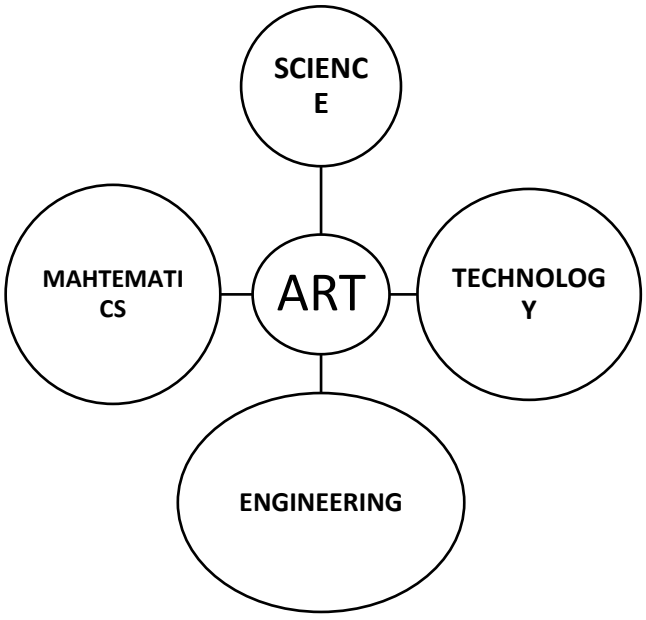
INTRODUCTION

In development of person's personality school plays very important role. In person's scholastic life enhance his\her inborn qualities like imitation skills, creativity, logical thinking and memory and personality becomes more accomplished. This more accomplished personality becomes a constructive part of society.

According to times period changes happen in society and in that manner, society makes changes in its education system. In those changes various education methods adopted. Like in ancient period Indian society had Varna based society. That society adopted Gurukul education system. In that education method, as per students' Varna, they gave them education.

In British ruling era, they made many changes in education system for their governance. After independence, so many changes happened in education system according to need of society and experimented various education method. In all one thing is same, that means enhancing students' inborn qualities. As per time methods changed but the objective remains same.

Understanding needs of coming Techno era, South Korea took initiative for using STEAM education. After seen benefits of STEAM education other countries also adopted this, like US, Europe etc.



Object of this method is to understand academic subjects Science, Technology, Engineering and Mathematics with help of art and also create more interest in students for all these subjects. With this, also enhance students' creativity and logical thinking ability.

In Maharashtra specially in Parabhani district yet not work on STEAM education method. There is no experiment on STEAM education and also doesn't have any research on it. Already, Parabhani district is not in educationally developed region.

For all these regions perused for decide to make this research on STEAM education method, in point of view, it will become milestone in Parabhani district education development.

NEED OF RESEARCH

Inborn human has qualities of creativity and logical thinking. It's school's liability to give more opportunity for these qualities using teaching method of their school subjects, in order to develop students' personality well. For this purpose, schools make experiments of various education methods.

In Parabhani district yet any school hasn't made any experiment or research with STEAM education method. For this purpose, it's need to study usefulness and impact of STEAM education method's on Parabhani district's schools' students.

Developing a STEAM based education package purposefully, to make tests on Parabhani district's primary schools' students in order to study usefulness and impact of STEAM education method on Parabhani district's schools' students' creativity and logical thinking.

IMPORTANCE OF RESEARCH

STEAM based education package will be useful for developing students' qualities of creativity and logical thinking. Also, by increasing these qualities

schools' students' personality will enhanced and it's help to create interest in their academic goals.

STATEMENT OF THE PROBLEM:

Impact of STEAM based Education package on creativity and logical thinking of primary school students.

OPERETIONAL DEFINITIONS

IMPACT

Effectiveness of the action plan after making experiment of STEAM based education package on Parabhani district primary school students means impact.

STEAM BASED EDUCATION PACKAGE

A set of STEAM based education activities on science subject for Parabhani district's primary schools' students.

CREATIVITY

Encourage primary school students of Parabhani district to think outside the box, take risks and develop their unique perspective through STEAM education package means creativity.

LOGICAL THINKING

The ability of using reason and systematic processes to analyze information, draw conclusions and solve problems to achieve the academic goals through STEAM based education package of Parabhani district's primary schools' students means logical thinking.

PRIMARY STUDENTS

Students studying in Parabhani district's schools' classes 1 to 3 with an expected age group of 5-9 are referred to as primary students.

OBJECTIVES TO THE STUDY

1. First study level of creativity and logical thinking of primary school student

2. To develop the education package based on STEAM education for school subject of primary students.

3. To study the effectiveness of steam base education package.

4. To study impact of STEAM based education package on creativity of primary students.

5. To study the impact of STEAM based education package on the logical thinking of primary students.

6. To find of the views of primary school students regarding STEAM package.

ASSUMPTIONS OF THE RESEARCH

1] Industrial, political and educational leaders rally behind initiatives that support the development of students' workforce competencies, such as by

"'promoting deeper' learning through skills such as problem solving and collaboration". (Allina, 2018, p. 80)

2] Transdisciplinary approaches to STEAM education are highly valued by both the teacher and the student because they allow the student to view the problem or design process from multiple angles or different perspectives that can be applied to a real-world context. (Costantino, 2018).

3] STEAM teaches students skills such as "critical thinking and problem solving; collaboration and communication; and creativity and innovation" . (Liao et al., 2016, p. 29)

HYPOTHESES OF THE RESEARCH

H1 1 There will be a significant impact of STEAM based education package in creativity on primary schools' students of Parabhani district.

H1 2 There will be a significant impact of STEAM based education package in logical thinking on the primary schools' students of Parabhani district.

NULL HYPOTHESES

1] There is no significant impact in creativity pre-test on primary students of Parabhani District school.

2] There is no significant impact in logical thinking of pre-test on primary students of Parabhani district school.

3] There is no significant impact in creativity of post-test on primary students of Parabhani district school.

4] There is no significant impact in logical thinking of post-test on primary students of Parabhani district school.

5] There is no significant difference in creativity and logical thinking as per gender wise in pre-test on primary students of Parabhani District school.

6] There is no significant difference in creativity and logical thinking as per area wise in pre-test on primary students of Parabhani District school.

7] There is no significant difference in creativity and logical thinking as per social level wise in pre-test on primary students of Parabhani District school.

8] There is no significant difference in creativity and logical thinking as per economic level wise in post-test on primary students of Parabhani District school.

9] There is no significant difference in creativity and logical thinking as per gender wise in post-test on primary students of Parabhani District school.

10] There is no significant difference in creativity and logical thinking as per area wise in post-test on primary students of Parabhani District school.

11] There is no significant difference in creativity and logical thinking as per social level wise in post-test on primary students of Parabhani District school.

12] There is no significant difference in creativity and logical thinking as per economic level wise in post-test on primary students of Parabhani District school.

SCOPE OF THE RESEARCH

1] SCOPE OF PURPOSE: This research purpose to improve creativity and logical thinking of Parabhani district's primary school students.

2] SCOPE OF AREA: The present research area is only for Parabhani district's Marathi, English, Semi-English medium's primary school which are from ruler and urban area of it.

3] SCOPE OF CONTENTS: This research is for Parabhani district primary schools' students' creativity and logical thinking.

4] SCOPE OF TIME: This research project will complete in December 2024 to August 2027 of this three years period.

LIMITATIONS OF THE RESEARCH

1] LIMITATION OF PURPOSE: This research for Parabhani district's primary schools' students to improve creativity and logical thinking.

2] LIMITATION OF AREA: The present study will be for primary schools' students of ruler and urban parts of Parabhani district

3] LIMITATION OF CONTENS: This research is conducted to study Parabhani district primary schools' students' creativity and logical thinking.

4] TIME LIMITATION OF RESEARCH: This research project will complete in December 2024 to August 2027 of this three years period.

DELIMITATIONS OF THE SEREACH

1] This research project for studying creativity and logical thinking ability of Parabhani district primary school students on that base develop STEAM base education package.

2] In that consider Parabhani district ruler and urban areas primary school.

RESEARCH METHODOLOGY

In this project qualitative and quantitative data will be collected by using survey and experimental methods so mixed research methodology will be applicable to study students' creativity and logical thinking ability.

POPULATION

In this research 1488 granted and non-granted primary school will come to study. This is the population of this research project.

SAMPLE AND SAMPLING METHOD

With standard phycological tests using major students' creativity and logical thinking mental ability of students' data will analyze to get average ability from Parabhani district's 50 primary schools' data will be collected as sample.

TOOLS OF RESEARCH

1] Standard phycological tests.

2] Developing STEAM base education package to increase students creatively and logical thinking ability. (by researcher own)

3) Pre-test and post-tests.

STATISTICAL TESTS

Present study Mean and Standard Deviation and t' test will be applied to test the significations of the study.

RESEARCH PROCEDURE

1] First study the related literature and define the problem under the guidance of guide.

2] Define the sampling method and experimental design as per problem and objects.

3] With the help of standard phycological test, developing STEAM based education package, to improve students' creativity and logical thinking.

4] Certified the data collection tools through the stage of certification.

5] By lottery method, we will decide the schools of Parabhani district.

6] Experimental procedure and collection of data.

7] Pre-test and post-test of students will be taken.

8] Analyzation and interpretation of collected data.

9] Writing, checking and making corrections of chapters under the guidance of guide.

10] After constructing the thesis, guide's signature will be taken and submitting five copies of the thesis to the university.

CHAPTERIZATION

1] Introduction

2] Review of research related literature

3] Research methodology

4] Data analyses and data interpretation.

5] Summary and Conclusion

RESEACHER'S TIMETABLE

A Timetable is required to Complete any research work.

Index	Details of Proceeding	Duration
1	Study for course work	DECEMBER 2022 to JUNE 2023
2	In-detail study for finding research topic	JULY 2023 to DECEMBER 2023
3	Study on topic related literature	JANUARY 2024 JUNE 2024
4	Layout of research	JULY 2024 to DECEMBER 2024
5	Creating research and tool and studies	DECEMBER 2026 to APRIL 2027
6	Actual research on field	APRIL 2027 JUNE 2027

7	Report Construction	JULY 2027
8	Report Presentation	AUGUST 2027

Expenses of Research

Index	Details of expenses	Approximate Amount
1]	Presenting the research plan	10000
2]	Purchase of other materials	100000
3]	Creating research tools	20000
4]	Direct research action	30000
5]	Research travel expenses	100000
6]	Research printing & photocopies	30000
7]	Research Construct	50000
8]	University Fee	55000
9]	E library and other charges	30000
10]	Lodging and Boarding	450000
10]	**Total**	**8,75,000**

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